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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,616	11/01/2006	Ulrike Rockrath	PAT-00 330	3608

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EXAMINER	
FRANK, NOAH S	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
10/31/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/595,616	ROCKRATH ET AL.	
	Examiner	Art Unit	
	NOAH FRANK	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims state, "free of ionic and potentially ionic groups". It is unclear what constitutes "potentially ionic", as many groups could be potentially ionic depending on how they are reacted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woltering et al. (WO 02/38685, citations based on English equivalent, US 7,041,729) in view of Mayer et al. (EP 0 708 788, citations based on English equivalent, US 6,372,875) and Ott et al. (DE 100 40 223, citations based on English equivalent, US 2003/0144413).

Considering Claims 1-2, 5-6, 9: Woltering et al. teaches pseudoplastic powder clearcoat slurrys comprising particles which are solid and/or high viscosity and are dimensionally stable under storage and application conditions and comprise as binder at least one polyol (Abs). The binder will therefore be incorporated into the dimensionally stable particles. The slurry also comprises water (8:60-65) and hence is aqueous. The binder preferably has a minimum film-forming temperature (Tg) greater than 30ºC (8:40-45), must carry hydroxyl groups (i.e. it is a polyol) (4:15-20), and may be polyurethanes (4:35-45). Woltering teaches the highly suitable polyurethanes being those described in EP 0 708 788 (5:15), which comprise cycloaliphatic diisocyanates such as isophorone diisocyanate and dicyclohexylmethane diisocyanate (6:20-35 of Mayer). At the time of the invention a person of ordinary skill in the art would have found it obvious to have used the polyurethanes, as taught in Mayer, in the invention of Woltering, as the highly suitable polyurethanes taught in Woltering (5:15 of Woltering).

Woltering does not teach the polyurethanepolyol free of ionic and potentially ionic groups. However, Ott et al. teaches pseudoplastic powdered lacquer slurries wherein "particle sizes for use in accordance with the invention are obtained even without the aid of additional external emulsifiers if the binder comprises ion-forming groups" and "it is preferred to aim for a low level of such groups, since when the customary crosslinking agents are used, free groups of this kind remain in the film and may reduce the resistance to ambient substances and chemicals" (¶0068-9). Woltering and Ott are analogous art because they are from the same field of endeavor, namely pseudoplastic aqueous dispersions. At the time of the invention a person of ordinary skill in the art

would have found it obvious to have used external emulsifiers, as taught by Ott, in the invention of Wolterling, in order to increase the resistance to ambient substances and chemicals.

Considering Claim 3: Wolterling does not teach the polyol being a diol. However, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. MPEP 2144.05. The functionality of the polyol controls the amount of crosslinking, and subsequently the hardness of the coating. Consequently, it would be obvious to optimize. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. MPEP 2144.05.

Considering Claim 4: Woltering does not teach the polyurethanepolyol being linear. However, Mayer et al. teaches using linear polyols in order to obtain a prepolymer of great flexibility (5:15-20). Woltering and Mayer are combinable because they are form the same field of endeavor, namely polyurethane based coating compositions. At the time of the invention a person of ordinary skill in the art would have found it obvious to have made the polyurethanepolyols linear, as taught by Mayer, in order to make the final coating flexible.

Considering Claim 7: Woltering teaches the polyurethanepolyols being those taught in Mayer et al. (EP 0 708 788) (5:15). Mayer et al. teaches using aliphatic or cycloaliphatic isocyanates (5:45-50), which would result in a polyurethane substantially free of aromatic structural units. At the time of the invention a person of ordinary skill in

the art would have found it obvious to have used aliphatic or cycloaliphatic isocyanates, as taught by Mayer, in the invention of Woltering as the highly suitable polyurethanes taught in Wotlering (5:15 of Woltering).

Considering Claim 8: Woltering teaches the polyol binder present in an amount from 9 to 60% by weight, based on the solids of the powder slurry (5:25-30).

Considering Claims 11-12: Woltering teaches using the slurry of the invention as a coating for automotive finishing, construction coating, coil coating, and container coating (10:10-20).

Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Woltering et al. (WO 02/38685, citations based on English equivalent, US 7,041,729) in view of Mayer et al. (EP 0 708 788, citations based on English equivalent, US 6,372,875) and Ott et al. (DE 100 40 223, citations based on English equivalent, US 2003/0144413).

Considering Claim 13: Woltering et al. teaches pseudoplastic powder clearcoat slurrys comprising particles which are solid and/or high viscosity and are dimensionally stable under storage and application conditions and comprise as binder at least one polyol (Abs). The binder will therefore be incorporated into the dimensionally stable particles. The system is diluted with water (8:15-20) and hence is aqueous. The binder preferably has a minimum film-forming temperature (Tg) greater than 30°C (8:40-45), must carry hydroxyl groups (i.e. it is a polyol) (4:15-20), and may be polyurethanes (4:35-45). Woltering teaches the highly suitable polyurethanes being those described in EP 0 708 788 (5:15), which comprise cycloaliphatic diisocyanates such as isophorone

diisocyanate and dicyclohexylmethane diisocyanate (6:20-35 of Mayer). At the time of the invention a person of ordinary skill in the art would have found it obvious to have used the polyurethanes, as taught in Mayer, in the invention of Woltering, as the highly suitable polyurethanes taught in Wotlering (5:15 of Woltering).

Woltering does not teach the polyurethanepolyol free of ionic and potentially ionic groups. However, Ott et al. teaches pseudoplastic powdered lacquer slurries wherein "particle sizes for use in accordance with the invention are obtained even without the aid of additional external emulsifiers if the binder comprises ion-forming groups" and "it is preferred to aim for a low level of such groups, since when the customary crosslinking agents are used, free groups of this kind remain in the film and may reduce the resistance to ambient substances and chemicals" (¶0068-9). Woltering and Ott are analogous art because they are from the same field of endeavor, namely pseudoplastic aqueous dispersions. At the time of the invention a person of ordinary skill in the art would have found it obvious to have used external emulsifiers, as taught by Ott, in the invention of Woltering, in order to increase the resistance to ambient substances and chemicals.

Response to Arguments

Applicant's arguments filed 6/30/08 have been fully considered but they are not persuasive. Please see the new rejection as set forth above.

While it is true that Woltering teaches a preference for using ionic or potentially ionic groups to disperse the polyol in water, the prior art teaches alternatives such as

external emulsifiers. Modifying Woltering by substituting emulsifiers for ionic and potentially ionic groups does not render Woltering unsuitable for its intended use, as the function of the ionic or potentially ionic groups is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOAH FRANK whose telephone number is (571)270-3667. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./ NF
Supervisory Patent Examiner, Art Unit 1796 10-10-08